Preventing Occupational HIV Transmission to Healthcare Personnel

As of December 2001, occupational exposure to HIV has resulted in 57 documented cases of HIV seroconversion among healthcare personnel (HCP) in the United States. To prevent transmission of HIV to healthcare personnel in the workplace, the Centers for Disease Control and Prevention (CDC) offers the following recommendations.

**Preventive Strategies**

Healthcare personnel should assume that the blood and other body fluids from all patients are potentially infectious. They should therefore follow infection control precautions at all times. These precautions include:

- the routine use of barriers (such as gloves and/or goggles) when anticipating contact with blood or body fluids
- washing hands and other skin surfaces immediately after contact with blood or body fluids, and
- the careful handling and disposing of sharp instruments during and after use.

Safety devices have been developed to help prevent needle-stick injuries. If used properly, these types of devices may reduce the risk of exposure to HIV. Many percutaneous injuries are related to sharps disposal. Strategies for safer disposal, including safer design of disposal containers and placement of containers, are being developed.

Although the most important strategy for reducing the risk of occupational HIV transmission is to prevent occupational exposures, plans for postexposure management of health care personnel should be in place. CDC has issued guidelines for the management of HCP exposures to HIV and recommendations for postexposure prophylaxis (PEP): *Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Postexposure Prophylaxis* (June 29, 2001).

These guidelines outline a number of considerations in determining whether or not healthcare personnel should receive PEP and in choosing the type of PEP regimen. For most HIV exposures that warrant PEP, a basic 4-week, two-drug (there are several options) regimen is recommended. For HIV exposures that pose an increased risk of transmission (based on the infection status of the source and the
type of exposure), a three-drug regimen may be recommended. Special circumstances such as a delayed exposure report, unknown source person, pregnancy in the exposed person, resistance of the source virus to antiviral agents, and toxicity of PEP regimens are also discussed in the guidelines. Occupational exposures should be considered urgent medical concerns.

**Building Better Prevention Programs for Health Care Workers**

Continued work in the following areas is needed to reduce the risk of occupational HIV transmission to healthcare personnel:

**Administrative efforts.** All healthcare organizations should train HCP in infection control procedures and on the importance of reporting occupational exposures. They should develop a system to monitor reporting and management of occupational exposures.

**Develop and promote the use of safety devices.** Effective and competitively priced devices engineered to prevent sharps injuries are needed for HCP who frequently come into contact with potentially HIV-infected blood and other body fluids. Proper and consistent use of such safety devices should be evaluated.

**Monitor the effects of PEP.** More data are needed on the safety and acceptability of different regimens of PEP, particularly those regimens that include new antiretroviral agents. Furthermore, improved communication prior to treatment about possible side effects and close follow-up of HCP receiving treatment are needed to increase compliance with the PEP.

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**For more information...**

**CDC National Prevention Information Network:**
- P.O. Box 6003
- Rockville, Maryland 20849-6003
- 1-800-458-5231

**CDC National STD & AIDS Hotlines:**
- 1-800-342-AIDS
- Spanish: 1-800-344-SIDA
- Deaf: 1-800-243-7889

**Internet Resources:**
- NCHSTP: [http://www.cdc.gov/nchstp/od/nchstp.html](http://www.cdc.gov/nchstp/od/nchstp.html)
- DHAP: [http://www.cdc.gov/hiv](http://www.cdc.gov/hiv)
- NPIN: [http://www.cdcnpin.org](http://www.cdcnpin.org)